



OIPE



DATE: 01/19/2002 RAW SEQUENCE LISTING TIME: 10:55:53 PATENT APPLICATION: US/10/037,860

Input Set : A:\2581.1004-004 Sequence Listing.txt

RECEIVED

PSAPR 0 1 2002 Output Set: N:\CRF3\01192002\J037860.raw 4 <110> APPLICANT: Jerome B. Posner Josep O. Dalmau

Myrna R. Rosenfeld 8 <120> TITLE OF INVENTION: Ma FAMILY POLYPEPTIDES AND ANTI-Ma

ANTIBODIES

11 <130> FILE REFERENCE: 2581.1004-004

C--> 13 <140> CURRENT APPLICATION NUMBER: US/10/037,860

C--> 13 <141> CURRENT FILING DATE: 2001-01-04

13 <150> PRIOR APPLICATION NUMBER: 09/189,527

14 <151> PRIOR FILING DATE: 1998-11-10

16 <160> NUMBER OF SEQ ID NOS: 14

18 <170> SOFTWARE: FastSEQ for Windows Version 4.0

20 <210> SEO ID NO: 1 21 <211> LENGTH: 18

22 <212> TYPE: DNA 23 <213> ORGANISM: homo sapiens

25 <400> SEQUENCE: 1

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30 <212> TYPE: DNA

31 <213> ORGANISM: homo sapiens

33 <400> SEQUENCE: 2

34 gtotttgogg atgtocacg

36 <210> SEQ ID NO: 3

37 <211> LENGTH: 2139

38 <212> TYPE: DNA

39 <213> ORGANISM: homo sapiens

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43 <222> LOCATION: (272)...(1258)

45 <221> NAME/KEY: misc\_feature

46 <222> LOCATION: (1)...(2139)

47 <223> OTHER INFORMATION: n = A, T, C or G

49 <221> NAME/KEY: misc\_feature

50 <222> LOCATION: 1699

51 <223> OTHER INFORMATION: n = A, T, C or G

53 <400> SEQUENCE: 3

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55 cagcgtcccc gagctcggct ccgagtgcac ctacggactg actgtggggg cagagaaggg 120

56 cgagatcagg actctgtctt tgttaatcgt gactgcatga aggtcgcctc cctcgggcct 180

57 acttggtggg agtgtctggt attgttctaa ggccaggagc acggtgagcc acagtctgtt 240

58 ggtagaattt ggcgtcttga tagttgagaa a atg gcg atg aca ctg ttg gaa

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19

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59 60									1	Met A	la N	Met 1	Thr I	Leu I	Leu (	G1u	
	gac	taa	tac	cgg	aaa	ata	gat	ata	aac	tcc	сад	aga	act	cta	tta	atc	340
				Arg													
64	пэр	111	10	1119	OI,	1100	пор	15	11511	001	<b>0111</b>	9	20	Lou	200	, 42	
	taa	aac		cca	ata	aac	tat		gag	act	αаа	atc		σασ	acc	ctc	388
				Pro													300
68	111	25	110	110	, uı	71511	30	n.sp	014	1114	Olu	35	014	014		200	
	сал		aca	atg	CCC	cad		ticc	tac	сда	atα		aaa	aαa	a t.o	t.t.c	436
				Met													
72	40	mu	nitu	1100	110	45	, uı	DCI	111	1119	50	пси	OI I			55	
		agg	ааа	gaa	aat		aaa	gca	acc	tta		gag	ata	act	aac		484
				Glu													
76	111	111.9	JIU	Olu	60					65	200	014			70		
	ata	gat	tac	gcc		atc	ccc	aσσ	σασ		cca	aac	aaa	gga	aga	atc	532
				Ala													
80	* ***	F	- 1 -	75				5	80			1	-1-	85	1		
	taa	ааа	ata	tta	t.t.t.	aaσ	ccc	cca		tct	gat	act	gaa	ttt	tta	gaa	580
				Leu		_											
84		-1-	90			-1-		95					100				
	aga	tta		ctc	ttc	cta	qct	aga	gag	aga	tgg	acc	gtg	caa	gat	gtt	628
				Leu													
88	,	105					110	_		-	-	115			-		
90	gcc	cgt	gtc	ctt	ggg	ttt	cag	aac	cct	act	ccg	acc	ccg	ggc	cca	gag	676
91	Ala	Arg	Val	Leu	Gly	Phe	Gln	Asn	Pro	Thr	Pro	Thr	Pro	Gly	Pro	Glu	
92	120				_	125					130					135	
94	atg	cca	gca	gag	atg	cta	aac	tat	att	ttg	gat	aat	gtt	att	cag	cct	724
95	Met	Pro	Ala	Glu	Met	Leu	Asn	Tyr	Ile	Leu	Asp	Asn	Val	Ile	Gln	Pro	
96					140					145					150		
98	ctt	gtt	gag	tcc	ata	tgg	tac	aag	agg	ctg	aca	ctt	ttc	tcg	ggg	aag	772
99	Leu	Val	Glu	Ser	Ile	Trp	Tyr	Lys	Arg	Leu	Thr	Leu	Phe	Ser	Gly	Lys	
100	)			155	;				160	)				165	5		
																g cac	820
103	Gly	/ His	s Pro	Arg	, Ala	Trp	Arg			n Phe	e Asp	Pro	Trp	) Le	ı Glu	ı His	
104			170	-				175					180				
																g agg	868
				ı Val	. Leu	Glu		-	Glr	ı Val	Sei			l Glu	ı Lys	s Arg	
108		185					190					195					
																cgc	916
			j Lei	ı Met	: Glu			Arg	j Gly	Pro			a Asp	Val	LILE	e Arg	
	200					205					210					215	0.5.4
								_								g aag	964
		Let	ı Lys	s Ser			Pro	Ala	i Iie			C Alá	a Glu	т СУ		ı Lys	
116					220					225		_ <u>.</u> .	_		230		1010
																cag	1012
		Let	ı Glu			. Phe	GLY	sei			ı sei	sei	Arg			a Gln	
120		_		235					240					245		- ~-+	1000
																gct	1060
5 ئـ⊥	1TE	: газ	s Pne	e Leu	AST	ıınr	Tyr	GII	ı AST	ı Pro	) GTZ	/ GIL	т гАз	ь тег	ı sei	c Ala	

RAW SEQUENCE LISTING DATE: 01/19/2002 PATENT APPLICATION: US/10/037,860 TIME: 10:55:53

Input Set : A:\2581.1004-004 Sequence Listing.txt

			July	Juc .	JEC.	14. //	CREJ	(011.	22002	2 \00.	3 / 00 0	, 1 a	~			
124		250					255					260				
	tat gto		cat.	ata	gag	cct		cta	cag	aaq	ata		gag	aaq	aaa	1108
	Tyr Val															
128	265		,			270				•	275			-	•	
	gcc att	gat	aaa	qat	aat	qtq	aac	cag	qcc	cqc	cta	gag	caq	qtc	att	1156
	Åla Ile															
	280	•	-	•	285					290					295	
134	gee ggg	gcc	aac	cac	agc	ggg	gcc	atc	cga	agg	cag	ctg	tgg	ctt	acc	1204
135	Ala Gly	Ala	Asn	His	Ser	Gly	Ala	Ile	Arg	Arg	Gln	Leu	Trp	Leu	Thr	
-136				300					305					310		
138	ggg gct	ggg	gaa	ggg	cca	ggc	CCC	aaa	cct	ctt	tca	gtt	gct	ggt	gca	1252
139	Gly Ala	Gly	Glu	Gly	Pro	Gly	Pro	Lys	Pro	Leu	Ser	Val	Ala	Gly	Ala	
140			315					320					325			
142	gat ccg	tgaç	ggagg	gaa q	gccca	aggga	ag ga	agga	ggag	gage	gctga	aggc	cac	cctt	ctg	1308
143	Asp Pro															
	cagttag	-														
	atcacag															
	cttagcc															
	atgtaac			_		_				_	_		-			
	tgctggc															
	tcatgga			_		-					_					
	ctgaatg	-	-	-	-	-	-		_		_	-				
	cagtaaa	-	_	-			_			-	-		-			
	ttgttcc	-			-			_								
	caatgca ctgagac								_	-	_			-	_	
		-			_				-				_		_	
	totoattgoa taagatadag atgtaaattg datggagagg ttgatatgda ootgtadagt 2 aattoadtoo oodatttoad ttotttgtoa gagaatagtt ottgttoata otgagtgtto 2															
															2139	
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168	1			5					10					15		
	Ser Gln	Arg		Leu	Leu	Val	Trp	_	Ile	Pro	Val	Asn		Asp	Glu	
170			20	_ •	_,	_		25			_	1	30	_		
	Ala Glu		Glu	GIu	Thr	Leu		Ala	Ala	Met	Pro		Val	Ser	Tyr	
172	3 mm - 14 m h	35	G1	<b>X</b>	Mak	Dha	40	3	C1	<i>α</i> 1	7	45	T	3 1 a	n 1 -	
	Arg Met	Leu	GIY	Arg	мес	55	rrp	Arg	GIU	GIU	60	АІА	гуѕ	Ald	Ald	
174	50 Leu Leu	C111	Lou	тьх	C1v		Val	Acr	Патъ	λl=		Tlo	Dro	λκα	(21 p	
176		GIU	ьeu	1111	70	ита	val	ush	тАт	75	мта	TIE	F10	ALY	80	
	Met Pro	Glv	Lve	Glv		Va 1	Trn	Lvc	Va l		Phe	Lvs	Pro	Pro		
178	110	O I I	-15	85	J-1	, 41		-10	90	Leu		-15	110	95		
	Ser Asp	Ala	Glu	-	Leu	Glu	Arq	Leu		Leu	Phe	Leu	Ala		Glu	
180	- 1		100	-			,	105					110	,		
181	Gly Trp	Thr	Val	Gln	Asp	Val	Ala	Arg	Val	Leu	Gly	Phe	Gln	Asn	Pro	



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187			115					120					125			_	
183	Thr	Pro	Thr	Pro	Gly	Pro	Glu	Met	Pro	Ala	Glu	Met	Leu	Asn	Tyr	He	
184		130					135					140					
185	Leu	Asp	Asn	Val	Ile	Gln	Pro	Leu	Val	Glu	Ser	Ile	Trp	Tyr	Lys	Arg	
	145	•				150					155					160	
	Leu	Thr	Γ.Θ.11	Phe	Ser		Lvs	Glv	His	Pro		Ala	Trp	Ara	Glv	Asn	
188	Tre (t	1111	LCu	THE	165	311	Lys	O ± 1	1115	170	9			5	175		
	DI	3	Desc	T		71	1110	mhr	Nan		Wal	Lou	C1n	Clu		c1n	
	Phe	Asp	Pro		Leu	υLu	HIS	THI		Gru	Val	Leu	GIU		ттр	GIII	
190				180					185				_	190	_	~ 1	
191	Val.	Ser	Asp	Val	Glu	Lys	Arg		Arg	Leu	Met	Glu		Leu	Arg	$GT\lambda$	
192			195					200					205				
193	Pro	Ala	Ala	Asp	Val	Ile	Arg	Ile	Leu	Lys	Ser	Asn	Asn	Pro	Ala	Ile	
194		210					215					220					
195	Thr	Thr	Ala	Glu	Cvs	Leu	Lvs	Ala	Leu	Glu	Gln	Val	Phe	Gly	Ser	Val	
	225				-1-	230	-1-				235			.1		240	
	Glu	Cor	Cor	λκα	Agn		Gln	Tlo	Tave	Dhe		Δsn	Thr	Tyr	Gln		
	Gru	3e1	261	ALG		ита	GIII	116	цуз	250	пец	HSII	1111	1 7 1	255	71511	
198	_		- 1		245	-		_	**- 1			<b>.</b>	G1	D		T	
	Pro	GIY	Glu		Leu	Ser	Ala	Tyr		He	Arg	Leu	GLU		Leu	Leu	
200				260					265					270			
201	Glit	Lys	Val	Val	Glu	Lys	Gly	Ala	Ile	Asp	Lys	Asp	Asn	Val	Asn	Gln	
202			275					280					285				
203	Ala	Arg	Leu	Glu	Gln	Val	Ile	Ala	Gly	Ala	Asn	His	Ser	Gly	Ala	Ile	
204		290					295					300					
	Arg		Gln	Leu	Trp	Leu	Thr	Glv	Ala	Glv	Glu	Glv	Pro	Glv	Pro	Lys	
	305	**** 9	0111	Lea		310					315	1		1		320	
		т о и	Con	Wa I	A 1 a		A 1 a	λαn	Dro		313					320	
	Pro	Leu	ser	val		эту	ніа	ASP	PIO								
208					325												
	<210				_												
2.1.2	<211	> L.E	ENGTE	H: 18	3												
213	< 21.2	> TY	PE:	DNA													
214	<21.3	> OF	RGANI	SM:	homo	sap	piens	S									
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217	gqqa	atac	ree o	agad	catc												18
	< 210																
	<211																
	<212																
					homo		o i o n c	~									
	<213				пошс	Sap	orens	5									
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226	<222	> LC	CAT	ON:	(1).	( :	585)										
228	< 400	> SE	EQUE	ICE:	6												
229	CCC	ctq	gca	ctg	tta	gag	gac	tgg	tgc	agg	ata	atg	agt	gtg	gat	gag	48
	Pro																
231	1	-			5			•	-	10					15		
	cag	aad	tca	cta	-	att	acc	aaa	ata		aca	gac	t.t.t	σασ		act	96
171	Gln	Lug	Cor	Lou	Mot	y c c	Thr	233	Tla	Dro	λla	Den	Dho	Glu	Glu	Δla	
	GIII	цур	Ser		Met	val	1111	GIA		110	aru	Hab	1 110	30	JIU	.114	
235		_ 4 .		20	_+-		~		25	++-		+~+	at a		3.00	t a t	1 1 1
	gag																144
238	Glu	He	Gln	Glu	Val	Leu	GIn	GLu	Thr	Leu	Lys	ser	Leu	GLŸ	Arg	ryr	

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	239 $35$ $40$ $45$ $241$ aga ctg ctt ggc aag ata ttc cgg aag cag gag aat gcc aat gct gtc $192$																
															~~+		100
																	192
	Arg		Leu	GIĀ	Lys	11e		Arg	Lys	Gln	GIU	ASN 60	Ala	ASII	Ald	Val.	
243		50					55	+	~-+	-+-	+ ~~		5 ± ±	000	207	a a	240
										gtc							240
		Leu	GIU	Leu	Leu		ASP	1111	ASP	Val	75	АГа	116	PIO	261	80	
<b>247</b>	65		~~~	~	~~~	70	ata	+ ~ ~	222	art ar		+++	220	3.00	aat		288
										gtg Val							200
	Vall	GIII	GIA	гуѕ		GTÀ	Val	пр	ьуѕ	9()	116	PHE	гуѕ	1111	95	ASII	
251	000	~~~	a a t	.T.D.G	85	att	<i>a</i> 2 2	2012	++ ~	aac	ata	+++	at a	паа		aaa	336
										Asn							330
255	דודכו	ASP	1111	100	Phe	Leu	Glu	Alg	105	ASII	Leu	FIIC	Leu	110	цуз	JIU	
	aaa	a a a	3.00		toa	aat	ata	+++		gcc	cta	aaa	cad		aca	tta	384
										Ala							304
259	GLY	13 1 11	1115	val	361	Gry	мес	120	Arg	Ald	Leu	СГУ	125	Gia	AIG	БСС	
	tat	cca		202	ata	CCC	tac		tica	сса	паа	tta		acc	cat	tta	432
										Pro							
263	DOI	130	niu	1111	val	110	135	110	UCI	110	Olu	140	БСС			204	
	tta		cad	aca	atσ	аса		aca	cct	cag	CCC		cta	aca	atσ	аσа	480
										Gln							
	145	017	0111	,,,,	1100	150				3111	155					160	
		caa	ааа	cta	сда		ttc	tica	aaa	agt		at.c	сса	acc	сса	gag	528
										Ser							
271	- 1 -			204	165				1	170					175		
	gaa	σασ	tcc	ttt		atc	taa	tta	gaa	cag	qcc	acq	qaq	ata	gtc	aaa	576
										Gln							
275				180					185					190		-	
277	gag	tgg	cct	tgaa	acaca	aac o	caaaa	aaaa	aa aa	aaaa	aaaa	J					615
	-	Trp		_													
279		•	195														
282	<210	)> SI	EQ II	ONO:	: 7												
283	<213	1> LI	ENGT	H: 19	95												
284	<212	2> T	YPE:	PRT													
285	<213	3> 01	RGAN	SM:	homo	sap	piens	3									
			EQUE														
288	Pro	Leu	Ala	Leu	Leu	Glu	Asp	Trp	Cys	Arg	Ile	Met	Ser	Val	Asp	Glu	
289	1				5					10					15		
290										Pro					Glu	Ala	
291																	
	Glu	Ile		Glu	Val	Leu	Gln		Thr	Leu	Lys	Ser		Gly	Arg	Tyr	
293			35					40					45				
	Arg		Leu	Gly	Lys	Ile		Arg	Lys	Gln	Glu		Ala	Asn	Ala	Val	
295		50					55				_	60	_ •	_	_	- 3	
		Leu	Glu	Leu	Leu		Asp	Thr	Asp	Val		Ala	Ile	Pro	Ser		
297		~ .		_		70		m		**. 1	75	<b>5</b> 1	<b>.</b>	rn l	D	80	
	Val	GIn	Gly	Lys		GLy	Val	Trp	Lys	Val	11e	Phe	Lys	Tnr		Asn	
299	<i>a</i> 2		m l	<i>(</i> 2.2	85	τ.	<i>α</i> 1	3		90	T	Dh-	т	(2.1	95	Ø1	
300	GIn	Asp	rnr	GIu	ьие	Leu	GIU	arg	ьeu	Asn	Leu	ьиe	ьeu	GIU	ьуs	GIU	

 VERIFICATION SUMMARY
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L:13 M:270 C: Current Application Number differs, Replaced Current Application No

L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:152 M.341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 L:679 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12 L:680 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12